

# ***DRAFT***

## **Permit Evaluation Report**

Rancho Cotate High School  
5450 Snyder Lane  
Rohnert Park Ca, 94928

Application Number: 14657  
Plant Number: 17810

### **Background:**

Rancho Cotate High School has submitted this application for a Permit to Operate for the following equipment/operation:

S-1 Paint Spray Booth Operation, Global Finishings booth with HVLP spray guns.

Rancho Cotate High School is utilizing this spray booth as part of their vocational education program.

### **Emissions:**

The emission summary for this sure (S-1) is in the following table:

**Table 1, Usage and Emissions**

Coating Description	Usage (Gal/y)	VOC Content (lb/gal)	POC Emission Lb/day	POC emission (tpy)
Etch Primer, Transtar	50	6.5	1.25	
Primers, PPG & Marhyde	100	2.1	0.8	
Top coat DuPont	150	4.5	2.6	
Cleanup Solvent	50	6.5	1.25	
Total	350	-----	5.9 (365 days)	0.77

- ❑ Maximum Daily Average Emissions:

$$\text{POC} = (1,535 \text{ lb/y}) / (260 \text{ d/y}) = 8.7 \text{ lb/d}$$

- ❑ Plant Cumulative Increase:

$$\text{POC} = 0.00 \text{ tpy (existing)} + 0.77 \text{ tpy (new)} = 0.77 \text{ tpy}$$

### **Toxics**

The TACs emitted from this coating operation consist of toluene, xylene, methyl ethyl ketone, ethyl benzene and ethylene glycol methyl butyl ether acetate. A Health Risk Screen Assessment (HRSA) is carried out when the emissions of these TACs exceeds the trigger levels outlined in Regulation 2, Rule 5, Table 1. Below is a table showing the trigger levels of the TAC, as well as the planned emission of each compound under the

existing permit condition. As you will note, none of these TAC emissions exceed the trigger level. Thus a HRSA is not required.

TAC	Trigger level, #/yr	Actual Emission, #/yr
Toluene (primer)	12,000 #/yr	9 #/yr
Xylene (primer)	27,000 #/yr	54 #/yr
Methyl ethyl ketone (primer & topcoat)	39,000 #/yr	57 #/yr
Ethyl benzene (primer & topcoat)	77,000 #/yr	31 #/yr
Ethylene GMBEA (topcoat)	2,300 #/yr	12#/yr

**Statement of compliance:**

The spray booth (S-1) is subject to and in compliance with District Regulation 8, Rule 45, and Section 301 and 302 for VOC Limits, Section 303 for Transfer Efficiency, Section 308 for Surface Prep and Solvent Loss Minimization, and Section 316 for Particulate Filtration.

This project is considered to be ministerial under the District's CEQA regulation 2-1-311 and therefore is not subject to CEQA review (PHBK Chapter 5). The engineering review for this project requires only the application of standard permit conditions and standard emissions factors and therefore is not discretionary as defined by CEQA.

**New Source Review:**

This operation has the potential to emit less than 10 pounds of POC per day, therefore does not trigger Best Available Control Technology (BACT) requirements. However, it should be noted that this source achieves BACT in practice by virtue of having VOC compliant paints, high transfer efficiency sprayguns, uses proper air filtration media and otherwise complies with Regulation 8, Rule 45. This level of control is also considered Toxic Best Available Control Technology (TBACT) for this amount of emissions.

POC Offsets are not applicable since the facility wide emissions are less than 15 tons per year.

**Public Notification:**

The facility is located on the grounds of a Rancho Cotate High School and therefore is within 1000 feet of the outer boundary of K-12 School. It is therefore subject to the public notification requirements of Regulation 2-1-412 due to the increase in the emissions from this project. A public notice will be sent to all parents of students of the above-mentioned school and all residents within 1000 feet of the facility. There will be a 30-day public comment period.

**Conditions for S-1(Paint Spray Booth):**

1. Net usage of coating at S-1 shall not exceed the following limits, in any consecutive twelve-month period:
  - a. Coatings 300 gallons

b. Cleanup Solvent 50 gallons  
(basis: Cumulative Increase)

2. Except as allowed in Condition No.2, coatings and cleanup solvents other than the materials specified in Condition 1, and/or usages in excess of those specified in Condition 1, may be used at S-1, provided that the owner/operator can demonstrate that both of the following are satisfied:

- a. Total emissions of POC from S-1, do not exceed **1,535** pounds in any consecutive twelve month period; and
- b. Total emissions of NPOC and/or POC from S-1 do not exceed **1,535** pounds in any consecutive twelve-month period; and
- c. The use of these materials does not increase toxic emissions above any risk screening trigger level.

(basis: Cumulative Increase; Toxic Risk Screen)

3. In order to demonstrate compliance with the above conditions, the following records shall be maintained by the owner/operator in a District approved log. These records shall be kept on Site and made available for District inspection for a period of 24 months from the date on which a record is made.

- a. Type and monthly usage of all POC and/or NPOC containing materials used;
- b. If a material other than those specified in Condition 1 is used, POC, NPOC and toxic component contents of each material used; and mass emission calculations to demonstrate compliance with Condition 2, on a monthly basis;
- c. Monthly usage and/or emission calculations shall be totaled for each consecutive twelve-month period.

(basis: Cumulative Increase; Toxic Risk Screen)

\* End of permit conditions \*  
Condition Number: 23156

**Exemption:**

None

**Recommendation:**

Issue a Permit to Operate for the following source:

**S-1 Paint Spray Booth operation, Global Finishing booth with HVLP spray gun.**

By:

*Duncan Campbell, Air Quality Technician II*

*July 19, 2006*